



INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR

upon the recommendation of the Senate hereby confers the degree of

Doctor of Philosophy

on

KAMAL HUSSAIN

in recognition of the research work on

Modeling and Investigation of Active and Passive Semiconductor Devices for All-Optical Communication

Given under the seal of the Institute at Kharagpur on the Twenty Sixth day of July, Two Thousand and Fourteen


Registrar




Director